August 28, 2002

Exemption No. 6632D
Regulatory Docket No. FAA–2001–8744

Mr. Kent Olsen
Vintage Aircraft Chief Pilot
Evergreen Air Venture Museum
3850 Three Mile Lane
McMinnville, OR 97128–9494

Dear Mr. Olsen:

This is in response to your December 26, 2000, letter petitioning the Federal Aviation Administration (FAA) on behalf of Evergreen Air Venture Museum (Evergreen) for an exemption from §§ 91.315, 91.319(a), 119.5(g), and 119.21(a) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would allow Evergreen to operate its (1) Chance Vought (Goodyear Company) FG–1 Corsair (FG–1) and North American T–28 Trojan (T–28) aircraft, which hold experimental airworthiness certificates; (2) Grumman TBM–1C Avenger Torpedo Bomber (TBM–1C) and North American P–51 Mustang (P–51) aircraft, which hold limited airworthiness certificates; and (3) North American SNJ–5 (SNJ–5) aircraft, which holds a standard airworthiness certificate, for the purpose of carrying passengers on local flights in return for donations.

You note that Evergreen intends to operate these aircraft the same way it operates its Boeing B–17G (B–17) aircraft. You add that these aircraft will be maintained under an approved maintenance program that meets the requirements of § 91.409 and that aircraft maintenance records will be maintained and made available to the FAA.

You state that the pilot in command (PIC) would—

1. Hold at least a commercial pilot certificate with an instrument rating and type rating, if required;

2. Hold a current letter of authorization for the aircraft;

3. Have a total of at least 3,000 hours of aeronautical experience and 25 hours in the particular model of aircraft; and

4. Complete three takeoffs and three landings to a full stop within the preceding 90 days.

You also state that Evergreen would maintain records showing each pilot's qualifications and currency and make these records available to the FAA.

You add that all flight operations would be conducted—

1. At operating altitudes of at least 1,000 feet above ground level, except when necessary for takeoff and landing;

2. Between the hours of official sunrise and sunset;

3. With a ceiling of at least 2,000 feet and visibility of at least 5 statute miles;

4. Within a 50-nautical-mile radius of the departure airport;

5. With the number of passengers limited by the number of available approved seats; and

6. Within weight and balance limits.

We note that Evergreen holds this exemption from §§ 91.315, 119.5(g), and 119.21(a) that permits it to operate its B–17 aircraft, which has a limited airworthiness certificate, to carry passengers on local flights in return for donations. We find that because Evergreen's T–28 and TBM–1C aircraft hold an experimental and limited airworthiness certificate, respectively, they can be operated under this exemption. Therefore, we will further amend this exemption to provide relief from § 91.319(a), which is applicable to aircraft with experimental airworthiness certificates, and add the T–28 and TBM–1C aircraft to the list of aircraft authorized to be operated. We also will revise the conditions and limitations to include the T–28 and TBM–1C aircraft.

We recognize that we authorized the Confederate Air Force, Inc. (now called the Commemorative Air Force, Inc.), to operate the P–51 for compensation under Grant of Exemption No. 6802, as amended, and the Planes of Fame Air Museum to operate the Vought F4U–1A (also manufactured by Goodyear Company as the FG–1) and the P–51 for compensation under Grant of Exemption No. 7063. These aircraft were originally designed as single-seat aircraft and were subsequently modified from the original manufacturer's design to accommodate a passenger. We have reevaluated our previous policy and find that an acceptable level of safety cannot be maintained in these modified aircraft. The addition of extra passenger accommodations may be acceptable for the owner of the aircraft, a passenger who may be a family member of the owner, or an additional crewmember necessary for the exposition or display of the aircraft; however, it is not acceptable for a paying passenger who is unfamiliar with the aircraft, its systems, and emergency or abnormal procedures requirements. Therefore, even though Evergreen's P–51 and FG–1 aircraft were modified

under an FAA-approved process, because they were originally designed and manufactured as single-seat aircraft, they will not be included on the list of aircraft authorized to operate under this exemption.

With respect to Evergreen's request to operate its SNJ–5 aircraft, which holds a standard airworthiness certificate, we have determined that if the history and experience of flight in a vintage World War II aircraft can be accomplished in an aircraft with a standard airworthiness certificate, there would be no compelling reason to grant an exemption. Therefore, we find that if Evergreen wishes to provide flight experiences in an aircraft with a standard airworthiness certificate, it may do so provided it complies with the applicable operating requirements of 14 CFR part 121 or 14 CFR part 135. If we were to grant Evergreen's request for its SNJ–5 aircraft, it would permit Evergreen to compete with other operators holding certificates under part 121 or part 135 without Evergreen complying with the higher safety requirements of its competitors.

You indicate that the conditions and reasons regarding public interest and safety, presented in the original petition upon which the exemption was granted, remain unchanged.

We have determined that good cause exists for not publishing a summary of the petition in the Federal Register because the amendments to the exemption would not set a precedent and any delay in acting on this petition would be detrimental to Evergreen.

We also have determined that the justification for the issuance of Exemption No. 6632, as amended, remains valid with respect to this exemption.

In an effort to allow the public to participate in tracking our rulemaking activities, we have transitioned to the Department of Transportation's online Docket Management System (DMS), located at http://dms.dot.gov. This new docket system enables interested persons to view requests on, submit requests to, and download requests from the DMS in accordance with 14 CFR § 11.63. Please submit future requests through the DMS.

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701 delegated to me by the Administrator, Exemption No. 6632, as amended, is hereby further amended by (1) providing relief from § 91.319(a) in addition to §§ 91.315, 119.5(g), and 119.21(a); (2) revising the list of aircraft authorized to be operated to include the T–28 and TBM–1C aircraft in addition to the B–17 aircraft; (3) revising the conditions and limitations; and (4) extending its January 31, 2004, termination date to August 31, 2004, unless sooner superseded or rescinded.

This exemption is subject to the following conditions and limitations:

1. Evergreen must maintain its B–17, T–28, and TBM–1C aircraft in accordance with the—

    a. Maintenance requirements specified in the applicable make and model type specification sheet, as amended;

    b. FAA-approved maintenance inspection program that meets the requirements of § 91.409(f)(4) and (g); and

    c. Applicable make and model military technical manuals, as appropriate.

2. The PIC must—

    a. Hold at least a—

        i. Commercial pilot certificate with a multiengine or single engine land airplane rating, as appropriate;

        ii. An airplane instrument rating; and

        iii. An appropriate letter of authorization (LOA) or a type rating, as applicable;

    b. Have completed within the previous 12 calendar months, Evergreen's PIC qualification and recurrent flight and ground training program in the aircraft for which PIC privileges are sought;

    c. Have completed within the previous 12 calendar months, Evergreen's PIC proficiency check in the aircraft for which PIC privileges are sought;

    d. Have a total of at least 3,000 hours of aeronautical flight experience, 1,000 hours of aeronautical flight experience in multiengine or single engine land airplanes, as applicable, and 25 hours in the applicable aircraft; or have a total of at least 1,000 hours of aeronautical flight experience, 200 hours of aeronautical flight experience in multiengine or single engine land airplanes, as applicable, and 100 hours and 50 takeoffs and 50 landings in the applicable aircraft; and

    e. Have accomplished within the previous 90 days, three takeoffs and three landings to a full stop in the aircraft for which PIC privileges are sought. For initial PIC qualification in an aircraft, or if the pilot has allowed his or her takeoff and landing currency to lapse in that aircraft, the takeoff and

landing currency may not be accomplished during passenger-carrying operations.

3. For multiengine aircraft, the second in command (SIC) must—

   a. Hold at least a commercial pilot certificate with a multiengine or single engine land airplane rating, as appropriate, and an airplane instrument rating;

   b. Have completed within the previous 12 calendar months, Evergreen's SIC qualification and recurrent flight and ground training program in the aircraft for which SIC privileges are sought;

   c. Have completed within the previous 12 calendar months, Evergreen's SIC proficiency check in the aircraft for which SIC privileges are sought;

   d. Have a total of at least 1,500 hours of aeronautical flight experience, 250 hours of aeronautical flight experience in multiengine or single engine land airplanes, as applicable; or have a total of at least 500 hours of aeronautical flight experience, 100 hours of aeronautical flight experience in multiengine or single engine land airplanes, as applicable, and 25 hours and 10 takeoffs and 10 landings in the applicable aircraft; and

   e. Have accomplished within the previous 90 days, three takeoffs and three landings to a full stop in the aircraft for which SIC privileges are sought. For initial SIC qualification in an aircraft, or if the pilot has allowed his or her takeoff and landing currency to lapse in that aircraft, the takeoff and landing currency may not be accomplished during passenger-carrying operations.

4. Evergreen must develop and maintain a written B–17, T–28, and TBM–1C qualification and recurrent ground training program for its PICs and SICs that covers the training subjects listed below. Each PIC and SIC must receive the following training and iterations of training within the previous 12 calendar months before serving in a PIC or SIC position in that aircraft for Evergreen:

	REQUIRED TRAINING TASKS	ITERATIONS
a.	General information and description of the airplane.	1
b.	Aircraft limitations.	1
c.	Aircraft servicing.	1
d.	Airspeeds.	1
e.	Fuel system.	1

f. Electrical system. 1

g. Hydraulic system. 1

h. Engines. 1

i. Instruments and avionics. 1

j. Landing gear, brakes, controls, and flaps systems. 1

k. Pneumatic system. 1

l. Propeller. 1

m. Emergency procedures including—

i. Instruction in emergency assignments and procedures; 1

ii. Instruction in crewmember coordination; 1

iii. Individual instruction in the location, function, and operation of the emergency equipment, including fire detection and extinguishing systems and procedures; and 1

iv. Instruction in the handling of emergency situations including—

A. Fire in flight or on the surface and smoke control procedures with emphasis on electrical equipment and related circuit breakers found in the cockpit area. 1

B. Illness, injury, or other abnormal situations involving passengers or crewmembers. 1

n. Weight and balance. 1

o. Performance planning. 1

p. Airplane’s checklist. 1

5. Evergreen must develop and maintain a written B–17, T–28, and TBM–1C qualification and recurrent flight training program for its PICs that covers the areas of operations, tasks, and iterations as listed in the following table of training tasks. Each PIC must successfully accomplish this training before being assigned PIC responsibilities and duties. Each PIC must receive and successfully accomplish the following training and iterations of training within the previous 12 calendar months before serving in a PIC position in that aircraft for Evergreen:

REQUIRED TRAINING TASKS	ITERATIONS
a. Preflight preparation.	
i. Aircraft exam (oral or written).	1
ii. Aircraft performance and limitations (oral or written).	1
b. Ground operations.	
i. Preflight inspection.	4
ii. Cockpit resource management.	4
iii. Powerplant start procedures.	4
iv. Taxiing.	4
v. Pretakeoff checks.	4
c. Takeoffs and departures.	
i. Normal and crosswind takeoffs.	3 within the previous 90 days
ii. Powerplant failure.	3
iii. Aborted takeoffs.	3
d. Inflight maneuvers.	
i. Steep turns.	4
ii. Approach to stalls.	4
iii. Powerplant failure.	4
iv. Specific flight characteristics.	4

e.	Landings and approaches to landing.		
	i.	Normal and crosswind approaches and landing.	3 within the previous 90 days
	ii.	Maneuvering to a landing with a simulated powerplant failure.	3
	iii.	Rejected landing.	3
	iv.	Landing from a no-flap or a nonstandard-flap approach.	3
f.	Normal and abnormal procedures.		
	i.	Powerplant.	3
	ii.	Fuel system.	3
	iii.	Electrical system.	3
	iv.	Hydraulic system.	3
	v.	Environmental and pressurization system (as appropriate and if equipped).	3
	vi.	Fire detection and extinguishing system.	3
	vii.	Navigation and avionics system.	3
	viii.	Electronic flight instrument system and related systems (as appropriate and if equipped).	3
	ix.	Flight control system.	3
	x.	Anti-ice and deice system.	3
	xi.	Aircraft and personal emergency equipment.	3
g.	Emergency procedures.		
	i.	In-flight fire and smoke control.	2
	ii.	Rapid decompression (as appropriate and if equipped with a pressurization system).	2
	iii.	Emergency descent.	2

iv.	Ditching, if flights are to be conducted overwater.	2
v.	Emergency egress.	2

h. Postflight procedures.

i.	After-landing procedures.	4
ii.	Parking and securing aircraft.	4

6. Evergreen must develop and maintain a written B–17 qualification and recurrent flight training program for its SICs that covers the areas of operations, tasks, and iterations as listed in the following table of training tasks. Each SIC must successfully accomplish this training before being assigned SIC responsibilities and duties. Each SIC must receive and successfully accomplish the following training and iterations of training within the previous 12 calendar months before serving in an SIC position in that aircraft for Evergreen:

	REQUIRED TRAINING TASKS	ITERATIONS
a.	Operational procedures applicable to the powerplant, equipment, and systems.	1
b.	Performance specifications and limitations.	1
c.	Normal, abnormal, and emergency operating procedures.	1
d.	Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls.	3 within the previous 90 days
e.	Engine-out procedures and maneuvering with an engine out while executing the duties of PIC.	1
f.	Crew resource management training.	1
g.	Familiarization with the aircraft flight manual, placards, and markings.	1

7. Each PIC must successfully accomplish a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial and recurrent training program). The proficiency practical test must cover the areas of operations and tasks listed below in the following table of testing tasks. Each PIC must be found competent and proficient by the Portland flight standards

district office (FSDO) (Northwest Mountain (NM) FSDO No. 9) (or by a procedure that has been approved by the Portland FSDO) on those areas of operations and tasks before being assigned PIC duties and responsibilities in that aircraft for Evergreen:

REQUIRED TESTING TASKS	ITERATIONS
a. Preflight preparation.	
i. Aircraft exam (oral or written).	1
ii. Aircraft performance and limitations (oral or written).	1
b. Ground operations.	
i. Preflight inspection.	1
ii. Cockpit resource management.	1
iii. Powerplant start procedures.	1
iv. Taxiing.	1
v. Pretakeoff checks.	1
c. Takeoffs and departures.	
i. Normal and crosswind takeoffs.	1
ii. Powerplant failure.	1
iii. Aborted takeoffs.	1
d. Inflight Maneuvers.	
i. Steep turns.	1
ii. Approach to stalls.	1
iii. Powerplant failure.	1
iv. Specific flight characteristics.	1
e. Landings and approaches to landing.	
i. Normal and crosswind approaches and landing.	1

ii.	Maneuvering to a landing with a simulated powerplant failure.	1
iii.	Rejected landing.	1
iv.	Landing from a no flap or a nonstandard flap approach.	1
f.	Normal and abnormal procedures.	
i.	Powerplant.	1
ii.	Fuel system.	1
iii.	Electrical system.	1
iv.	Hydraulic system.	1
v.	Environmental and pressurization system (as appropriate and if equipped).	1
vi.	Fire detection and extinguishing system.	1
vii.	Navigation and avionics system.	1
viii.	Electronic flight instrument system and related systems (as appropriate and if equipped).	1
ix.	Flight control system.	1
x.	Anti-ice and deice system.	1
xi.	Aircraft and personal emergency equipment.	1
g.	Emergency procedures.	
i.	Inflight fire and smoke control.	1
ii.	Emergency descent.	1
iii.	Ditching, if flights are to be conducted overwater.	1
iv.	Emergency egress.	1

h. Postflight procedures.

i. After-landing procedures. 1

ii. Parking and securing aircraft. 1

8. Each SIC must accomplish a proficiency practical test upon completion of the initial qualification training program and upon completion of the recurrent training program (every 12 calendar months after completion of the initial and recurrent qualification training program). The proficiency practical test must cover the areas of operations and tasks listed in the following table of testing tasks. Each SIC must be found competent and proficient by the Portland FSDO (NM FSDO No. 9) (or by a procedure that has been approved by the Portland FSDO) on those areas of operations and tasks before being assigned SIC duties and responsibilities in that aircraft for Evergreen:

REQUIRED TESTING TASKS	ITERATIONS
a. Operational procedures applicable to the powerplant, equipment, and systems.	1
b. Performance specifications and limitations.	1
c. Normal, abnormal, and emergency operating procedures.	1
d. Three takeoffs and three landings to a full stop as the sole manipulator of the flight controls.	1
e. Engine-out procedures and maneuvering with an engine out while executing the duties of PIC.	1
f. Crew resource management training.	1
g. Familiarization with the aircraft flight manual, placards, and markings.	1

9. Evergreen must document and record all ground and flight training and/or testing required by this exemption in a manner acceptable to the Portland FSDO. The documentation and records must contain the following information:

a. The date of each training or testing session.

b. The amount of time of each session of ground or flight training or testing.

c. The location of each session of ground or flight training or testing.

d. The airplane registration number in which each flight training or testing session was given.

e. The name, certificate number, signature, and date of issuance of the Letter of Operational Authority (LOA or LOOA) of the pilot or other authorized instructor who provided each session of training or testing.

f. The signature and printed name of the pilot who completed the training or testing, which will serve to verify that the pilot received each session of training or testing.

10. When requested, the Evergreen qualification and recurrent ground- and flight-training programs and/or records listed in condition Nos. 4, 5, 6, and 9 must be made available to the Portland FSDO, 1800 Northeast 25th Avenue, Suite 15, Hillsboro, Oregon 97124, 503–681–5500.

11. Evergreen must have the services of an FAA-certificated airframe and powerplant mechanic or an appropriately rated repair station available at all stopovers to perform all required maintenance inspections and repairs.

12. Evergreen must maintain the following information and records and must make those records available for review to the FAA when requested:

    a. The name of each flight crewmember Evergreen authorizes to conduct flight operations in its aircraft under this exemption;

    b. Copies of each PIC's or SIC's pilot certificate, medical certificate, qualifications, and initial and recurrent training and testing documentation to comply with condition Nos. 2, 3, 7, 8, and 9; and

    c. Records of maintenance performed and maintenance inspection records to comply with condition No. 1.

13. Evergreen must notify the Portland FSDO by written report, electronic mail, or facsimile within 24 hours of any of the following occurrences:

    a. Each inflight fire in any system or area that requires activation of any fire-suppression system or discharge of a portable fire extinguisher.

    b. Each exhaust system component failure including the turbocharger components that causes damage to any engine, structure, cowling, or components.

c. Each aircraft component or system that causes, during flight, accumulation or circulation of noxious fumes, smoke, or vapor in any portion of the cabin or crew area.

d. Except for training, each occurrence of engine shutdown or propeller feathering and the reason for such shutdown or feathering.

e. Each failure of the propeller governing or feathering systems.

f. Any landing gear system or component failure or malfunction that requires the use of emergency or standby extension systems.

g. Each failure or malfunction of the wheel brake systems that cause loss of brake control on the ground.

h. Each aircraft structure that requires major repair due to damage, deformation, or corrosion, and the method of repair.

i. Each failure or malfunction of the fuel system, tanks, pumps, or valves.

j. Each malfunction, failure, or defect in any system or component that requires taking emergency action of any type during the course of any flight.

k. For the purpose of this section, "during flight" means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

14. Before permitting a person to be carried aboard its aircraft for the purposes authorized under this exemption, Evergreen will inform that person that its aircraft hold a limited airworthiness certificate or experimental airworthiness certificate, as appropriate; the significance of the airworthiness certificate as compared to a standard airworthiness certificate; and that the FAA has authorized this flight under an exemption from the requirements of §§ 91.315, 91.319(a), 119.5(g), and 119.21(a). The explanation of the significance of a limited airworthiness certificate or experimental airworthiness certificate, as appropriate, compared to a standard airworthiness certificate must include at least the following information:

    a. The FAA has not established nor has it approved limited or experimental category airworthiness certificated aircraft manufacturing standards. In contrast, standard category airworthiness certificated aircraft are manufactured to FAA-approved standards, including standards addressing the design of the aircraft and life-limited parts.

b. Limited airworthiness certificates are issued when the FAA finds the aircraft—

i. Has been previously issued a limited category type certificate and the aircraft conforms to that type certificate; and

ii. Is in a good state of preservation and repair and is in a safe operating condition.

c. An aircraft may be issued an experimental airworthiness certificate for the purpose of exhibition when the aircraft is intended only for exhibition of the aircraft's flight capabilities, performance, or unusual characteristics at airshows, motion picture, television, and similar productions and the maintenance of exhibition flight proficiency, including, for persons exhibiting the aircraft, flying to and from such airshows and productions.

d. Standard category airworthiness certificates are issued for an aircraft when the FAA finds the—

i. Aircraft has been built and maintained in accordance with that aircraft's type certification standards as established by the FAA; and

ii. Aircraft's inspection and maintenance requirements comply with the applicable Federal Aviation Regulations.

15. All flight operations must be conducted—

a. At an operating altitude of at least 1,000 feet above ground level (AGL);

b. Between the hours of official sunrise and sunset, as established in the American Air Almanac, as converted to local time;

c. With a flight visibility of at least 5 statute miles;

d. With a ceiling of at least 2,000 feet AGL;

e. Within a 50-nautical-mile radius of the departure airport with landing permitted at only that departure airport; and

f. At an airport that has a fire station or fire-fighting services available or within close proximity of the airport.

16. No persons other than the assigned flight crewmembers may be permitted on the flight deck or at the pilot station of the aircraft during flight operations.

17. Except for essential crewmembers, all flight operations must carry no more than the maximum number of passengers permitted by the aircraft's weight and balance limitations and number of approved seats in the aircraft.

18. Evergreen's aircraft must have the equipment listed in § 91.205(b) and that equipment must be in an operable condition during flight.

19. If an aircraft is to be operated over water and beyond the power-off gliding distance from shore, that aircraft must have the equipment listed in § 91.205(b)(12), and that equipment must be in an operable condition during flight.

20. Evergreen must hold and continue to hold a determination from the U.S. Internal Revenue Service that it is a § 501(c)(3) nonprofit, tax-exempt, charitable organization under §§ 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.

21. Evergreen must notify the Portland FSDO at least 5 working days before conducting any PIC or SIC initial or recurrent qualification training and any PIC or SIC initial or recurrent proficiency checks required to be conducted under the terms of this exemption.

22. No later than 72 hours before commencing flight operations under the terms of this exemption, Evergreen must notify the FAA FSDO with responsibility for the area in which it intends to conduct the flight operations and provide a copy of this exemption to that FSDO. This notice is in addition to the notification required under condition No. 21.

23. Failure to comply with any of the conditions and limitations of this exemption will be grounds for the immediate suspension or revocation of this exemption.

This letter is attached to, and is a part of, Exemption No. 6632.

Sincerely,

/s/

Louis C. Cusimano

Acting Director, Flight Standards Service